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# HEALTH

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## EDITORIAL

# Insomnia or Sleeplessness

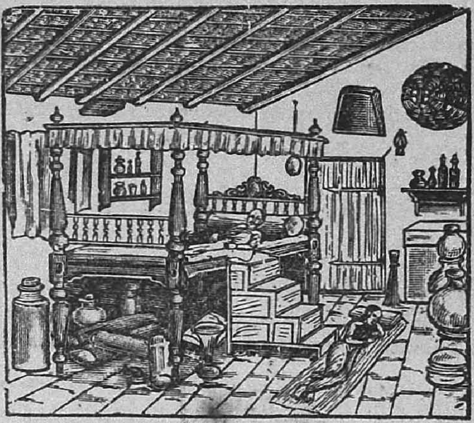
SLEEP is a state of rest of vlountary exercise of the powers of the body and mind. It is a condition in which the person concerned is unconscious of all that happens in the outside world, and has his bodily functions in a state of relaxation. It is, therefore, Nature's great restorative, because it is at this time that our tired body is re-invigorated and our jaded mind refreshed. Continuous activity produces fatigue and tiredness in the body and mind; muscles become exhausted and the intellectual powers dull. The person who would work in such a state can be compared to a peasant who would persist in mowing when his blunt scythe is no longer able to do more than ruffle the grass, which he ought to cut down. Fatigue follows activity and is a warning to the body not to do overwork and get exhausted, which might lead to serious consequences. To shake off the effects of fatigue, sleep is necessary. The value of sleep, therefore, is quite plain. In young dogs, for instance, loss of sleep causes death in about 5 days, whereas starvation kills them only in 15 to 25 days. This is also true of human beings to a certain extent.

The amount of sleep one requires varies according to the age of the individual; children require more sleep than adults. A new-born child sleeps the whole of the day, except during feeding; a child of 1 year, about 18 hours; of 6, about 12 hours and of 15, needs 9 to 10 hours' sleep. Adults require 7 to 8 hours' sleep. As age advances, the necessary period of sleep becomes shorter and shorter. It is, therefore, necessary to note here that there is a limit to sleep, and that neither too much sleep nor too little is healthy.

There are, however, some persons who acquire, from childhood, a habit of doing with a relatively small amount of sleep. Famous men like Napolean, Lloyd George and Churchill can cut down the period of sleep

to their convenience, and make up the deficiency by snatching a nap at odd moments. Some people experience the deepest sleep in the first two hours after retiring to bed, and some others, in the third hour.

Generally, people are not found suffering from the habit of over-sleeping. But, its opposite,—sleeplessness or insomnia—is a common complaint. Its causes may be physical or mental. Some of the physical causes are pain in various parts of the body, fevers, high blood-pressure and too much secretion of the thyroid gland. Mental causes are worry, fear, excitement and brain derangement. Only a small minority of those who complain of insomnia, really show symptoms of it. Because, many of such complainants get enough of sleep, though they feel that they have not. It is the dread of the impending mental defect and anxiety thereof that causes distress more than insomnia itself. As the patient is unable to occupy himself during the sleepless hours, all his anxieties tend to become more acute and disturbing.



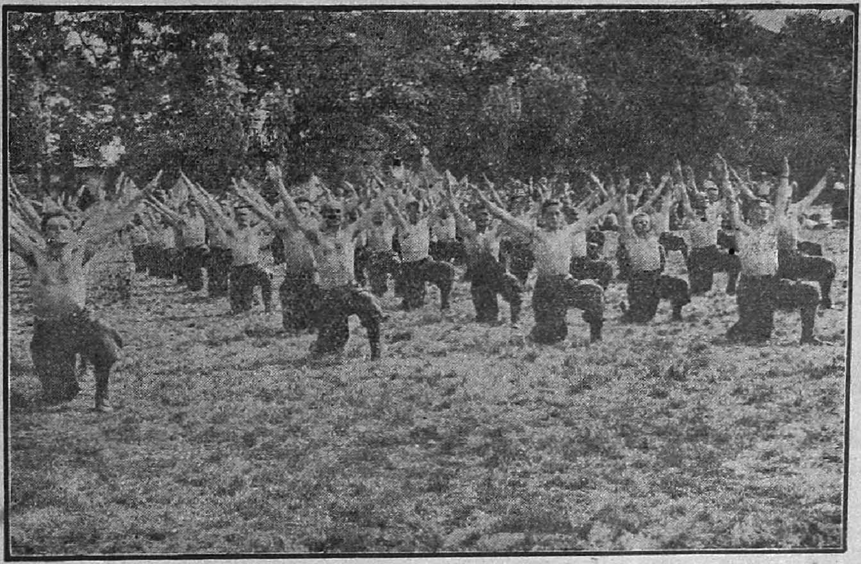
*INSANITARY SLEEPING ROOM.*

Here are seen things huddled together, which ought to find a place in a separate lumber room,

Insomnia is not a disease but a symptom, and its treatment must always be related to its cause. The patient should carefully avoid all drugs, not only because they do not remove the cause, but also their addiction causes more harm than insomnia itself.

The cure of insomnia is, after all, not difficult. Though all the physical disabilities, causing it, require treatment by a competent physician, there is much to be done by the patient himself by way of preventive and curative steps. The old saying 'Sleep must be earned' is too true. Muscular exercise produces fatigue and the latter, sleep. If you are not doing physical work, you should at least take a walk for 15 or 20 minutes just before bed time. Massage is a very good substitute for walking, if done properly. All external stimuli like sound, light, heat and cold must be excluded. The bed must be comfortable and bed clothes, light and warm in winter. It is a common fault to pile on too many blankets on bed, and many a bad dream and troubled sleep can be sometimes traced to this. There must be free ventilation, as stuffy rooms make sleep difficult. The patient should not have any heavy meal four hours before going to bed, but only light supper. A warm drink or a warm bath before retirement is frequently of great benefit as a sleep-producer. As regards noise, human mechanism adapts itself remarkably to it. People who live near railways soon learn to become undisturbed by passing trains. and many people in the war zones sleep through air raids and fail to hear sirens. Townsmen, who go to the country, may be kept awake by the uncanny silence prevailing there, whereas the villager may fail to get a wink of sleep in the town due to its noise. The most important thing, in getting good sleep, is the mental condition. The mind and brain must be at ease and there must be a feeling of tranquillity and

comfort, which must come from within. As pointed out already, worry, anxiety and excitement drive the sleep away. How we envy the poor labourer who slumbers heavily on the road-side on the lap of Mother Earth, without any of the comforts we can command! He has two requisites necessary for sleep, *viz.*, fatigue and or hearing of exciting news, you must avoid just before the sleeping time. Light reading for ten to fifteen minutes, which is neither exciting nor connected with business, would help to get sleep in the case of some individuals. Another trick worth trying is to indulge in quiet, deep breathing, which will relax the mental tension,



**Sleep must be earned by dint of Physical Fatigue and Mental Poise.**
Picture shows the Czech Army Tranining in England: by this, the soldiers, though serving in war zones, soon learn to get good sleep, undisturbed even through the shrieking sirens and enemy raids.

mental tranquillity. If you can also free your mind from all worries, sleep will come to you quite naturally. The financial bogey is, in fact, the worst of all sleep-reducers. Never think of monetary problems before retirement. If you have an argument with your partner, sit quitely for sometime, calm your mind, and then go to bed. Reading of thrilling novels and produce a feeling of rhythm and ease in the mind and body.

To conclude: in insomnia, the cause must be sought for and treated accordingly. To take hypnotics and drugs is no cure and indiscriminate taking of drugs may do irreparable harm. Sleep must be earned by means of physical fatigue and mental feeling of comfort and calmness.

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## For the quiet Hour

"O! Divine Master, grant that I may not so much seek to be consoled, as to console; to be understood, as to understand; to be loved, as to love; for it is in giving that we receive; it is in pardoning that we are pardoned; and it is in dying that we are born to eternal life." ST. FRANCIS OF ASSISI.—*Nursing Journal of India.*

# SOME POPULAR MISCONCEPTIONS ABOUT TUBERCULOSIS

By DR. D. M. JOSHI, M.B., B.S. (BOM.),

*Arogyavaram, Chittoor Dist.*

TUBERCULOSIS is undoubtedly a very dangerous disease. It has annihilated many families; it is the cause of an enormous waste of money and energy; and also, it is admittedly responsible for more than half the number of deaths in any country. Still, according to medical opinion, it is not as dreadful as the lay public thinks it to be. The general public, being ignorant of its real characteristics, has attributed all sorts of dangers, real or fantastic, to tuberculosis. As one who had the misfortune to contract the disease, and who had personally undergone all the trials and sufferings of the same, I lay claim to clear many misconceptions, which the public has, regarding this disease.

As it happens, soon after one has the ill-luck of falling a victim to the disease, one sees an utter transformation in the behaviour of one's friends and relatives. Whereas the patient formerly has a host of friends and relations who frequently call upon him and loudly applaud him as the most social and unsparing host, now he finds himself completely boycotted and left severely alone by his so-called social circle to singly brood over his misfortune. By their callous conduct, the poor victim is so much depressed and receives such a mental shock that he often courts an early escape from this world!

So then, what is the root cause of this strange conduct? It is either an ignorance of the real causes of infection or an instinct of self-preservation. For, a vast number of people think that tuberculosis is transmitted by the very breath of the patient! So, naturally, they avoid the atmosphere of the patient's room for fear of catching the infection!

Now, what are the facts? It is established beyond all doubts that tuberculosis is transmitted by the *sputum* and *sputum alone* of the T. B. patient and nothing else. His breath is as innocuous as that of anybody else. So, as long as the patient is very careful about his sputum, there is very little danger of infection.

**Some characteristics of Tubercle Bacillus.**—In order to understand fully the dangers of infection, we must first learn something about the tubercle bacillus. It was discovered by Robert Koch as long ago as 1882. It can be easily demonstrated with the aid of a microscope by a simple staining method. It grows very well on egg or potato medium. Within 4 to 6 weeks, a good growth can be obtained by culture.

It is estimated that a consumptive throws out at least 20 to 30 millions of bacilli in a day, through his sputum. So, we can imagine the terrible danger, we all run, of infection, if the patient is expectorating carelessly anywhere. But, luckily for us, the life of a bacillus, once it leaves the patient's body, is very short. Direct sunlight kills it within 10 to 15 minutes. In diffuse daylight and in open atmosphere, it cannot live for more than 15 to 20 hours. But in dark, ill-ventilated rooms and in moist places, it can live for 6 months or even more! In boiling water or milk, it is killed at over 80°C.

temperature. The most rapid chemical disinfectant to kill it is Carbolic acid. In hardly 5 % solution, it is killed within 3 minutes. Lysol (1 in 20) also kills it very rapidly.

Now, we will turn to the mode of infection of tubercle bacilli. There are usually two ways by which bacilli gain entrance into the body—one, by inhalation and the other, by ingestion. Dust particles, carrying dried sputum may contain bacilli. Or, while a patient is coughing or talking, a fine spray of his sputum and saliva is thrown out in the atmosphere. If any person is sufficiently near him, the bacilli may gain entrance through his nose or mouth. Still, there is a controversy regarding the actual mode of infection. Some observers say that the infected sputum goes to the lungs by direct inhalation of infected dust particles. Others dispute the claim of this route, and maintain that the bacilli are ingested by the stomach and intestines and from there by the lymphatic channels, they gain entrance into the lung. We have no necessity of disputing one or the other theory. For practical purposes, it is sufficient to know that infected dust or sputum is the source of infection.

After noting the above points, we can easily formulate devices to counteract the spread of infection. As the main source is the sputum, we must insist upon the patient not to spit anywhere but in his spittoon. The following simple but very important rules, if followed scrupulously, will practically eliminate the danger of infection from the patient to his attendants and to other persons.

**Rules for the patient.**—1. Never spit anywhere but in a covered spittoon, containing a disinfectant.

2. Always hold a sterilized gauze or a paper handkerchief in front of your mouth while coughing. As soon as you spit in the spittoon, wipe your mouth by the gauze, and keep it in a special bag, tied to your cot. Don't use the same gauze again. All handkerchiefs and gauzes should be thoroughly boiled after putting them in 40% Carbolic acid or Phenyl for over an hour.

3. For sneezing, same rule should be observed and the patient should never blow out his nose anywhere but in a handkerchief or gauze.

4. For washing the mouth and hands, a special bucket should be used containing Phenyl. A patient should never wash his mouth in an open bath-room indiscriminately.

5. Always, have special cups, saucers, plates and spoons etc. for the patient's use exclusively. Wash them with 20 % Carbolic soap after use and keep them in a separate place, so as not to mix them with other utensils.

6. When a patient is out for a walk, he should carry a small spittoon with him. Avoid the temptation of spitting anywhere on the road, keeping in mind that you are endangering the lives of others by indiscriminate spitting.

**Rules for attendants.**—1. When a patient is coughing, don't face him but stand behind him.

2. Whenever you are touching any part of the patient or his clothes, don't forget to wash your hands by 20% Carbolic soap immediately. Lysol (1 in 20) is also another rapid disinfectant for hands.

3. Be very careful whenever you are going to eat anything or have your meals. You must thoroughly wash your hands and face with Carbolic soap and always gargle with Listerine or any other antiseptic before meals. Ordinary common salt in boiling water is an excellent gargling solution.

4. Avoid sitting and sleeping too close to the patient as far as possible. A distance of 10 to 12 feet is safe enough.

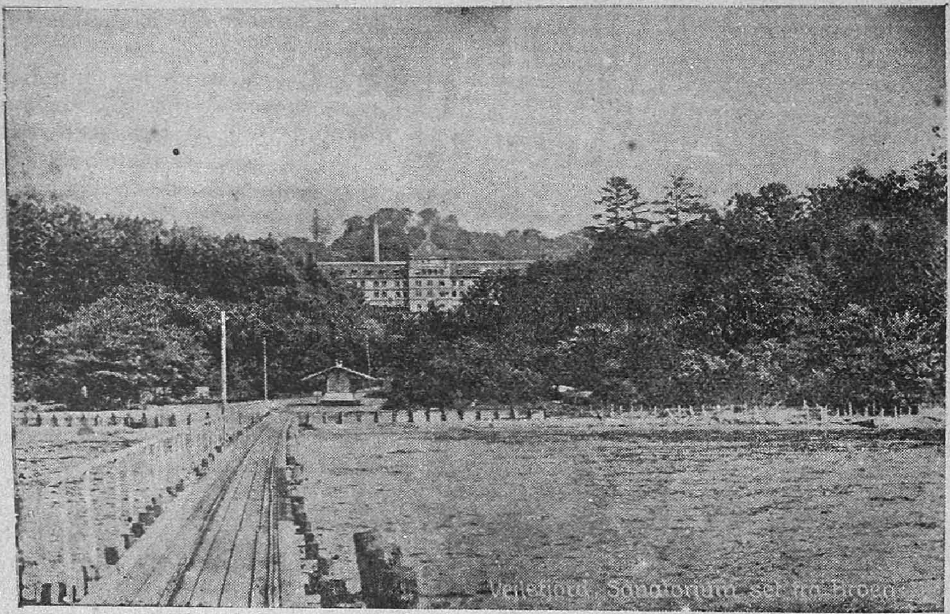
5. When you are attending on a T.B. patient, always try to be in an absolutely fit condition of health.

6. Be very regular in your meals, regular in your sleep and rest periods; spend as much time as possible in open air and don't do any excesses even too much exercise. Remember that the more the person keeps fit, the more he can resist almost effectively any infection.

Thus, a careful patient, observing the above rules scrupulously, is absolutely not dangerous to anybody. And the attendants and those coming in contact with the patient also can consider themselves quite safe, if they also follow the above rules.

**Heredity.**—The second most popular misconception is about heredity. People think that tuberculous parents will have tuberculous children. From extensive researches and considerable data collected from statistics, it is proved beyond doubt that tuberculous parents can have absolutely healthy children. Their children are in no way more susceptible to tuberculosis than those born of healthy parents. It is all a question of environment, in which a child grows, that counts. A child, though born of healthy parents, kept ill-nourished, in ill-ventilated rooms and in improper hygienic surroundings, will have the greatest chance of catching tuberculosis.On the the contrary, a child born of tuberculous parents, if brought up in healthy proper surroundings, will stand no chance. Many people believe that a tuberculous father will have tubercle bacilli in his semen. Even the best educated persons share this belief. It is proved, beyond any doubts, by thorough microscopic examinations that the semen of a tuberculous father or the milk of a tuberculous mother contains no bacilli. So, it can be easily seen that the father and the mother cannot transmit their disease to their offspring.

**The climate of a sanatorium.**—The third wrong idea, the lay public have,



VEJLEFJORD SANATORIUM SET FRA-BROEN.

"A T. B. Sanatorium is the last place on earth where one can catch tuberculosis".

is about the atmosphere of a tuberculosis sanatorium. They have a firm belief that as a sanatorium contains hundreds of tuberculous patients, naturally the atmosphere of the place must be quite saturated with T. B. germs. Hence, when an idea is mooted for a new sanatorium to be started in a particular locality, the people of that locality vehemently oppose it as being highly dangerous to their health. For the same reason, there are several people who are afraid to visit a sanatorium to see a sick relative or friend. But experiments carried out by scientists and medical research workers prove conclusively that this belief is completely wrong. One T.B. specialist is said to be fond of saying that a T. B. Sanatorium is the last place on earth where one can ever catch tuberculosis !

To prove this, a series of experiments were carried out. The sample of air from a sanatorium and one from a city were taken by scientists for examination. It was found that the total germ content of a city air is many times greater than that of a sanatorium. Secondly, the number of T.B. germs found in the atmosphere in a sanatorium was quite negligible as compared with the millions of T. B. germs found in a city air sample. Another important experiment was carried out by the doctors of the famous U. M. T. Sanatorium near Madanapalli in South India. Extensive surveys were undertaken to findout the percentage of infected persons in a particular locality. Saidapet, a suburb of Madras, was selected for the experiment. Each person was given an intradermal injection of $\frac{1}{500}$ dilution of Tuberculin and after 48 hours, reading of the test was done. If on the site of injection, there was definite swelling and a red flush of about 10 m.m. or more, the test was considered to be positive. Of course, this test does not show that a person has active tuberculosis at that moment, but it shows that this person has had slight or gross infection in the past or may have some hidden infection at present. The test is called Mantoux test. Out of 3309, so examined, 1924 or 58 % showed positive reaction ! So, further investigations by X-ray and sputum examinations were done among the positive cases. It was found that 33 persons or 1 in every 100, had active tuberculosis !

Then, a survey was carried out in the population, consisting of the sanatorium staff and their families, living quite close to the sanatorium. Out of about 1000 persons so examined, about 5% (mainly* males) showed positive reaction, which is not surprising, taking into consideration the fact that the male members, being on the staff of the sanatorium, have to come in contact with T.B. patients, day and night. Out of non-contacts consisting of women and children, there was not a single positive reaction, not a single individual was found to be suffering from active tuberculosis.

The above experiments prove conclusively that the atmosphere of a sanatorium is not only free from T.B. germ, but is distinctly better as compared with the atmosphere of any outside town or village.

I have tried, in this small article, to remove some of the misconceptions, which the public have, regarding tuberculosis. The important hints given in the article to be followed by patients and attendants are the result of the intimate personal experience I got when I was a patient in the sanatorium for over two years. If they are followed scrupulously, the spread of this dangerous disease will be successfully checked.

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* Vide Indian Medical Gazette, Sept. 1939.

# BEWARE OF THE RED LIGHTS

*By*

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JUST like the red lights on the highways, there are some red lights of danger in health matters. As clouds appear in the sky before rain, some symptoms appear in us before a disease attacks us. These symptoms are known as premonitory symptoms of the disease, and are designated as *red lights of danger* to health, shown by Mother Nature, who warns us in due time. Inspite of this, if we disregard her warning and run through the red lights, we shall be victims to various diseases. All our diseases are the result of running through the red lights of Nature.

*As a stitch in time saves nine*, steps should be taken to remedy a defect at its earliest stage;and if that is done, a lot of trouble will be averted. We suffer for not being on our guard at the first sign of trouble, whether of body or of mind. A person feels unwell,but does not mind it; he gets worse and yet takes no step. When he does call a doctor, his illness has perhaps taken a serious turn. If he had, at the onset, consulted a physician or even taken elementary precautions, much trouble and expense might have been saved. Preventive measure is of utmost importance; and many troubles that were at a time fairly common are gradually becoming more rare. So, it is wiser to avoid disease by following a healthy regime of life than to correct it by seeking remedies when already attacked. Moreover, prevention is better than cure and less costly too. It saves time and money, and spares many anxious thoughts.

There is another way of running through the red light. At the first sign of trouble, whether of the body or of mind, we do not take professional advice but fall into the hands of shrewd advertisers and dealers who always direct our attention to their proprietary remedies often advertised in newspapers and periodicals. These remedies are only symptomatic. A premonitory symptom is not a disease,but a warning symptom of an impending disease. Rationale of treatment of a disease is to remove the causes of the disease and not to treat the symptoms. As for example, fatigue requires rest, but in order to cover up fatigue, we generally take one or two strong cups of coffee or tea, a good cigar or a few cigarettes or possibly a swing of alcohol. These are all narcotics,and eventually cover up the fatigue and enable us to go on overdrawing our strength. If we keep this up, day after day long enough,we are on the straight road for a nervous or mental or physical break-down. For sleeplessness, if you take sleeping draught and continue it night after night for a few weeks, you are again on the highway for a crash, nervous or mental. There are numerous headache pills or powders, and pain killers in the market. If you use them to cover up your headache or pains for a few weeks, you may find, when it is too late, that some incurable condition is present and there is no remedy for it. For nervousness, if you keep on exhausting your nerve by taking some tonic or camouflaging in other ways, until you have used up all your reserve, you will become bankrupt nervously, and have a real nervous breakdown or mental lapse. Similarly, in cases of indigestion or constipation, if you indiscriminately

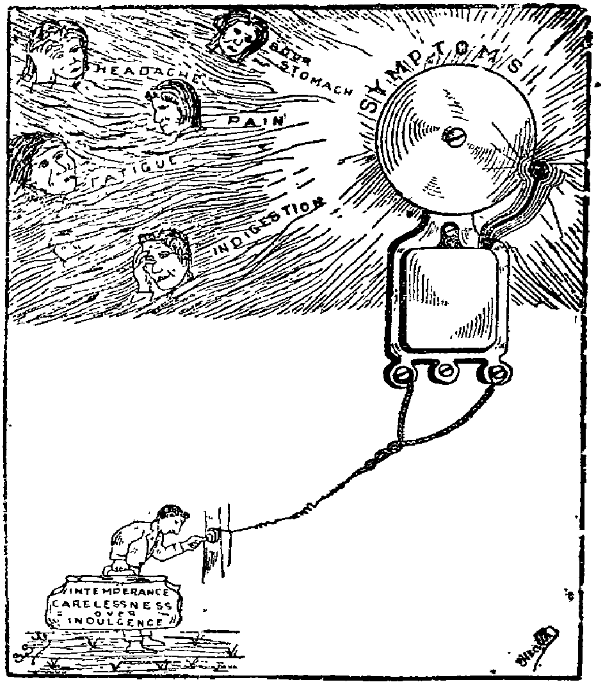
take astringents or purgatives on the false pretext of curing your trouble, you will fail to cure the disease and, at the same time, will aid the progress of your hidden disease. Thus, through ignorance,many of us run through the red lights.

Now, I shall discuss, in brief, some of the red lights of danger to health :

1. *Malaise :*—By malaise, we mean a feeling of illness or physical discomfort. Most illnesses are heralded by a day or two of malaise, before the acute stage is reached.

2. *Headache :* — Almost any upset in any part of the body can have headache for a symptom, and people use many different terms, to describe their headaches, such as stabbing, aching, nagging, throbbing, boring, nails being driven into the head, or tight bonds being tied round the head. Digestive disturbances of all kinds, including gastritis and constipation, eye-strain, anæmia, circulation in the blood of toxins derived from some focus of infectious fever, working in an impure atmosphere, diseases of the brain—these are some of the causes of headache, and only by a medical examination of the patient can it be found out which is responsible in any given case. The so-called headache powders may give temporary relief, but once their effect has passed off, the headache is almost certain to recur. Only by treating the cause can permanent benefit be obtained.

3. *Fatigue :*—It is not possible to work as quickly and as hardly, when you are tired, as when you are fresh; for, being tired means that the human machine is running down and needs winding up. The best way to wind it up is by rest. Fatigue indicates that you have used up all the available liquid assets you have ; and if you go further without rest, you must draw upon your reserve, break into your principal sell stock or mortgage your future supply of strength.



Nature sets up in man, premonitory signs and symptoms which ought to be construed as the red lights of danger, duly warning him of the impending diseases that are often found way-laying him along the course of his Journey of Life.

4. *Insomnia :*—It is one of the early signs of disturbed working of mind and body. It is, in itself, a danger signal to health—if allowed to go on, it leads to serious consequence. Among the common causes which may initiate sleeplessness are lack of fresh air from bad ventilation of the bed room, insufficient exercise, heavy meals before retiring, late hours and mental work, carried beyond the stage of weariness. Bodily ill-health, particularly when associated with pain, and notably in heart

and chest, frequently hinders sleep, while mental ill-health ranks as the chief cause of insomnia. Worry and apprehension are formidable enemies of sleep, for they tend to reach their highest pitch at bed-time. Attempts to procure relief from this symptom by taking sleep-producing drugs are likely to produce dangerous consequences. Drugs do, in fact, play a very important part in the treatment of some cases of insomnia, but they must be taken only under medical direction, and in exactly the prescribed doses. Whatever the cause may be, the longer the symptom is allowed to persist, the more difficult it may be to cure.

It cannot be too strongly emphasised that if simple home-remedies for insomnia fail, skilled advice should invariably be sought. A good, firm mattress, a quiet, warm room, a hot water bottle, a hot drink on retiring, warm but not too heavy bed-clothes—these may serve to cure insomnia of not too long a duration. But, if such common sense methods fail, the remedy is to be sought not in the chemist's shop, but in the doctor's consulting room.

5. *Anorexia* :—It means lack of proper appetite for food. Such a condition, developing in a previously healthy person, may indicate simply that he needs a tonic. It may be on the other hand, the first symptom of serious illnesses such as tuberculosis or cancer of the stomach. The cause in any particular case can be assigned only by careful medical examination.

6. *Pain* :— Pain is a significant symptom of disease, whenever manifested. Pain, felt in a certain part of the body, may lead to the diagnosis of some disease, but it must be remembered that disease in a certain organ often causes pain in a different part of the body, owing to the distribution of nerves. As it is not always possible to localise the site of pain, one should seek professional advice, and set about correcting the thing that causes pain.

7. *Nervousness* :—It is also one of the features of the condition known as anxiety, and must be looked upon as part of that affliction. Nervousness which finds expression in a definite fear of some object or situation (for example, fear of dogs, fear of catching a particular disease etc.) is practically always a symptom of a *neurosis*. Broadly speaking, a neurosis is the result of a battle between the conscious mind, which has been trained to adapt itself to our present social code, and the unconscious mind, which is for ever striving to obtain for the individual that pleasant, selfish and wholly irresponsible life which he enjoyed as a baby. Normally, people manage to balance their lives so as to satisfy their primitive instincts, without much conflict between the conscious and unconscious minds, but when the conflict is severe, a neurosis develops to hide the real cause of the conflict. A child who suffers from nervousness, if untreated, grows into an adult suffering from a neurosis, and nervous disease in adults is much more difficult to cure than it is in children, in whom fewer paths of memory have been established.

8. *Indigestion* : — This common condition may arise acutely as a result of over-eating, or of taking an ill-balanced meal. It may be associated with such a diversity of conditions as chronic gastritis, gastric ulcer, cancer of the stomach, gall-stones, appendicitis, constipation, fever, pregnancy and Bright's disease. It may also arise in connection with liver, heart, appendix and lung disease. For this reason, when the practitioner makes a careful examination of their case, patients should not feel that he is making a great fuss about a small matter. It may well be that the only treatment that will benefit them is treatment

that aims directly at removing the underlying causes of their complaint, and the "indigestion mixtures" would do more harm than good, by easing their pain, while leaving the disease itself to get progressively worse.

9. *Constipation* :—It is one of the common ailments which is the cause of many a worse disease, if allowed to go on. Any state of ill-health in the alimentary tract will, however, be made worse by constipation. This is a matter which everyone must find out for himself. The number of motions required for healthy individual varies with different people. In most persons, the waste matter, should no longer be retained in the bowel for more than 24 hours ; some persons, however, seem to be at their best when this period is 48 hours ; a very few, when it is longer; and some, when it is only about 12 hours. There is no hard and fast rule.

Various diseases—from hemorrhoids and hernia to high blood pressure and hemiplegia—may be traced to constipation. Drugs should only be taken on a doctor's prescription. Self-medication with laxative pills and other preparations often makes the condition worse, and ultimately may bring the patient to a state in which he can never open his bowel, except by taking increasingly large quantities of drastic purgatives.

So,every one should take care of the red lights of Nature sensibly, correct the underlying causes, and travel the road of life through a long, safe and happy journey.

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# PREVENTION OF CHOLERA

*By* DR. S. K. GUPTA, B.D.Sc., B.O., *Laboratory Clinic, Pasrur, (Pb.).*

FOR preventing cholera everybody should follow the following rules :

1. Eat fresh fruits every day.

2. Lessen the carbohydrate percentage of food and replace it with more vegetables and greens.

3. See that there is free motion of the bowels every day.

4. Resort to enema if you feel that your bowels are irregular or inert.

5. Lessen your fat intake.

6. Do not use stimulating beverages such as coffee, tea, wine or brandy, cocoa, alcohol, beer, etc.

7. Avoid smoking, chewing or snuffing of tobacco.

8. Drink sufficient quantities of cold water daily.

9. Do not indulge in foods other than your two principal meals.

10. Take daily four doses of blue water of half ounce each.

11. Avoid immoderate work or drudgery.

12. Take moderate exercise or recreation.

13. Take sufficient rest.

14. Go to bed before 9 p.m. and rise early by 5 a.m.

15. Lessen your sexual unions, better to avoid them.

16. Avoid all habits that enervate, irritate or exhaust you.

17. Be optimistic.

18. Take cold or warm water bath twice daily, taking care to cleanse every inch of your body.

19. Do not forget to do your duties to God through prayer and worship every day.

20. Have a cool and calm disposition to all things material.

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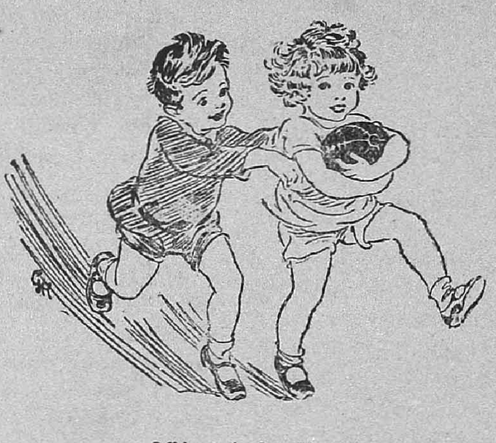
# SUN-GAZING

By

Dr. R. S. Agarwal,

*Eye-Specialist, Delhi.*

It is a well-known fact that constant protection of the eyes from sunlight, or from other kinds of light, is followed by weakness or inflammation of the eyes or eye lids. Children, living in dark rooms, where the sun seldom enters, acquire an intolerance for light. Some of them keep their eyes covered with their hands, or bury their faces in a pillow, and do all they possibly can to avoid exposure of their eyes to ordinary light. I have seen many hundreds of cases of young children, brought to the clinic with ulceration of the cornea, which may become sufficient to cause blindness. Putting these children in a dark room is a blunder. My best results in the cure of these cases were obtained by encouraging the patients to spend a good deal of the time out of doors, with their faces exposed to direct rays of the sun. In a short time, these children became able to play and enjoy themselves a great deal more out of doors, exposed to the sun-light, than when they protected their eyes from the light. Not only is the sun beneficial to the children with inflammation of cornea, but it is also beneficial to adults.



**Off into the Sunshine**

Children at play, facing the ultra-violet ray, are always healthy and gay.

**Different ways of taking sun treatment.**—1. *With closed eyes*:—Sit comfortably facing the sun with the eyelids closed. The body is swayed from side to side like a pendulum, gently and lazily, for ten to thirty minutes. One should stop the treatment as soon as the sun causes discomfort to the body. This treatment can be taken by every one, and it will prove very useful to keep the vision good and to keep the eyes healthy.

2. *With closed eyes and sun glass*: In this, the patient faces the sun just as in No. 1 with closed eyes. Focus the light with the condensing lens or sun-glass on the closed eye lids. The focus light seems to be moving in the opposite direction. This treatment is given only for two minutes at a time. One can give this for more time, if the patient does not feel any discomfort. Do not focus the light at one point for more than a second; otherwise, you may burn the part. Either the patient should move or the lens should move from side to side. Do not condense the rays when they are hot.

This treatment can be practised by everyone. If this treatment is given properly, one obtains greater benefit than by merely facing the sun with

closed eyes. This is very useful in iritis and glaucoma.

3. *Sun-treatment on everted lids* :—This is to be taken in trachoma or conjunctivitis. Evert the lids and let the rays of the sun fall on them for about two minutes at a time. Several times, it can be taken in one sitting. Sometimes, when the rays are mild, they are condensed by sun-glass. Move the glass from side to side so that the rays may not fall at one point for a longer time.

4. *Sun treatment with open eyes* :—Morning time is the best. Sit comfortably and move the body gently from side to side. Keep the eyes half open and look at the sky below the sun and note the following facts :

(*a*) The sun is constantly seen.

(*b*) Front objects, as trees, buildings, etc., seem to be moving in the opposite directions, *i.e.*. when you move to the right, they move to the left, and when you move to the left, they move to the right. This kind of imagination checks strain and gives relaxation.

The treatment may be taken for 5 to 30 minutes. The eyes may be closed for a moment every now and then. Sun treatment with open eyes is most useful, practised in the right way.

The vision should remain clear after taking sun treatment. If the vision is dim or some colours come before the eyes, practise relaxation methods whichcan be studied from my book "Mind and Vision".

5. *Sun treatment for young children* :—Hold the child in such a way that the rays of the sun fall on the eyes, and move it continuously in slow, short, easy curves, instead of throwing the child rapidly, irregularly and intermittently, from side to side. The treatment may be given for 5 minutes or more. This is very useful in trachoma, conjunctivits and other eye discomforts of the child's eyes.

6. *Sun treatment while walking* :—Keep the sight on the ground and walk facing the sun. Imagine the road and side objects moving backwards.

**General directions.**—1. Do not sit in the hot sun. Cover the head with a kerchief; morning time is the best time for sun treatment.

2. If the vision is defective, practise relaxation methods after sun treatment, and wash the eyes with cold water. Palming is one of the very popular relaxing eye exercises. Keep the eyes closed and cover them with the palms of the hands, avoiding any pressure on the eyeballs, for 5 minutes or more.

3. If the long sight is defective, practise on the Snellen test card, and if the sight for near vision is defective, practise on the reading test type. Note that benefit comes within a few minutes. What was impossible for you to read becomes clear.

4. All eye patients can take the sun treatment, whether they use any medicine or not.

5. When the sun is not shining, substitute a strong electric light 200 watt to 500 watt. Sit at about six inches to one foot distance from the light, allowing it to shine on your closed eye-lids.

6. If you face the sun even for five minutes daily, it is sufficient to keep your eyes ever healthy.

7. The benefit comes within a few minutes, and you can test the efficiency in any number of cases. Let every patient face the sun, and then apply the medicine.

"I face the sun with open eyes for about 30 minutes daily and the vision remains clear after sun treatment. I used glasses for 9 years, and now my vision is normal", says Raja Saheb of Aundh, who advocates *Suryanamaskar*, and is of 74 years.

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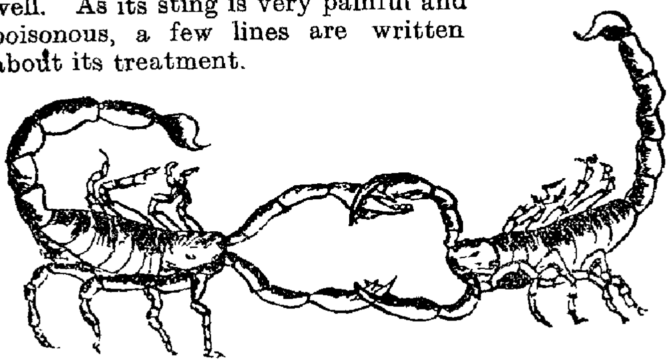
# THE SCORPIONS' PARADE

*By* Dr. R. R. Shukla, *Municipal Dispensary, Ajmer.*

THE scorpion has a bad name, but he shows a certain old-world elegance in affairs of the heart. The lady is approached and taken by both her claws, these being held in the larger pincers of the male, who then, walking backwards, conducts her on a love walk of considerable length, proving that it is the males who seduce the females.

The scorpion is well known all over the world for its sting. One who has been once stung by it, knows it quite well. As its sting is very painful and poisonous, a few lines are written about its treatment.



**The Scorpions' Parade.**
The male holds the female's claws and then proceeds to walk backwards to a considerable distance.

**Treatment.**—*Preventive* :— (1) One should not walk about barefooted, especially during summer and rains.

(2) Always use clothes, shoes, umbrella, beddings etc. after having carefully examined them.

(3) Do not roam and probe about in the dark.

(4) Do not inhabit dirty and dark places.

(5) Do not allow rubbish to collect near about your dwelling places.

*General* :—(1) Immediately, apply a ligature above the stung part.

(2) *Consult an experienced doctor.*

(3) To avoid shock and to keep up the tone of the heart, give plenty of milk, honey, glucose with saline and juice of fruits *e.g.* apples, mangoes etc.

(4) Immediately put the stung part in hot water.

*As the poison is acid,* it should be neutralized with alkaline applications *e.g.* :

(1) Salt dissolved in kerosine oil.

(2) Warm paste of neem leaves made up with salt.

(3) Drop saline lotion in the eyes, (one tea-spoonful to 1 pint of water).

(4) Warm paste of onions pounded with salt.

5. Ammonium chloride and lime mixed together.

(6) Liquor ammonia.

(7) One pinchful of Pot. Permanganas and Citric acid powdered and placed on the spot with a drop of water.

(8) A warm paste made up of chest-nut (a horny growth growing above the knee of the horse).

(9) Warm paste of alum.

(10) Juice of papaya fruit (Irand Kakri.)

(11) Phenyle or Petrol.

# PREVENTION and CURE of TOOTH TROUBLES

By

R. V. LAKSHMI RATAN (*Senior*), *Madras.*

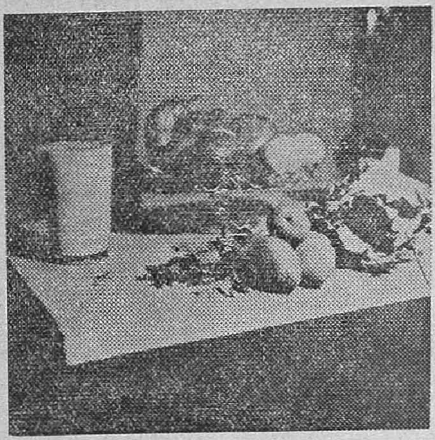
DISCOLOURED teeth, swollen and spongy gum, bleeding, pyorrhea, loose teeth, caries, and such other troubles can be prevented and cured by the intake of proper food to a good extent. Tooth troubles cannot be exclusively cured by mechanical means employed by a dentist or by tooth brushes and pastes. Faulty food habits from child-hood onwards, eating of soft foods largely, intake of foods deficient in vitamins and minerals, consumption of such acid-forming foods as cereals (rice, wheat, ragi and cumbu), dhals etc., in large quantities, acid and alkali imbalance in the system, contribute towards the development of these troubles.

Sherman and Smith, on page 168 of their book, *The Vitamins*, quote Hanke (1929), who found:

"Even more striking was the prompt response in the arrest of caries and in improvement in the gum tissue and tightening up of the loose teeth in the pyorrhea cases following dietary changes involving a marked increase in vitamin C. For adults (persons) one pint daily of orange juice containing the juice of one lemon, together with one-fourth to one-half head of lettuce or its equivalent in raw cabbage is recommended for the vitamin C supply. More recently, Hanke (1930) reports confirmation of his finding on a large group of patients".

Aykroyd, in the chapter on *Diet and Teeth* of his book entitled *Vitamins and other Essentials*, says:

"Modern civilized man is encouraged to eat in childhood soft over-cooked food—white bread, milk puddings, biscuits, and porridge etc.—in the place of hard uncooked vegetables and fruit, and gritty unmilled cereals, which nourish children under more primitive conditions. All teeth contain crevices in which food debris may be caught, and cleansing is necessary to remove them. Now soft food has no cleansing action, but when food is eaten which requires a good deal of crushing and disintegration before swallowing, the tooth crevices are kept clean by friction. Further, soft foods such as bread soaked in milk, and porridge are largely composed of carbohydrate, which, when held in the tooth crevices, become decomposed by the action of bacteria. The result is the formation of organic acids which eat away the dental enamel and give rise to caries."



For prevention of your teeth from decay and disease, eat enough of foods and leafy vegetables—foods rich in vitamins, calcium and phosporus.

The condition obtaining in this country is that the rice is polished to enhance its keeping quality. Vitamins of $B_1$ and $B_2$ group, protein, phosphorus, iron, etc., contained in the whole rice (with germ and bran intact) have heen removed to a large extent by the process of polishing; these are still further reduced during the processes of washing and cooking as practised in this country. Rice as polished, washed and cooked (boiled in excess water, conjee strained and made soft) and eaten mixed with such

liquid preparations as soup, pepper-water, buttermilk etc., would not provoke mastication but would only facilitate swallowing.

According to *Health Bulletin* No. 23, country guava (299 mgs.), drumstick leaves (220 mgs.), amaranth leaves (173 mgs.), coriander leaves (136 mgs.) cabbage (124 mgs.), orange (68 mgs.), and lime juice (63 mgs.) are rich vitamin C foods. The figures given in brackets represent the content of vitamin C in milligrammes per 100 grammes (8.75 tola weight). The green leaves mentioned above and the country guava are considerably richer than oranges in vitamin C content. Vitamin C is generally and gradually destroyed by heating and ageing; it is soluble in water. Drumstick leaves, amaranth leaves (*thota kura, mullai keerai*) and coriander leaves are rich in vitamin A as well. All green leafy vegetables, fruits and milk contain alkali-forming mineral elements in excess, intake of which in adequate quantities will neutralize the acid condition of the system.

**Good teeth.**—For preserving the teeth in sound condition and avoiding tooth troubles, foods rich in vitamin C, calcuim and phosphorus should be eaten. Some vitamin D may also be required and this could be obtained by exposing the green leafy vegetables to sunlight for about fifteen minutes. A good supply of vitamin B-1 food is essential to maintain the gastro-intestinal, nervous and endocrine system in order; this vitamin B-1 and phosphorus could be obtained from whole rice or its products containing the germs and bran. Milk and green leafy vegetables are good sources of calcium and other important minerals and vitamins.

The green leafy vegetable should be fresh and free from insects and pests. They should be well-washed in hot water, exposed to sunlight, chopped, prepared and consumed in the form of uncooked salad (*kosambari*) in combination with other non-leafy vegetables flavoured to taste; but one or more of the green leafy vegetables should be the prevailing stock on the preparation of the salad. The juice from green leaves may be extracted, flavoured to taste and consumed instead of salad if preferred. Two to four ounces (5 to 10 tola weight) of green leafy vegetables, and six ounces (15 tola weight) of non-leafy vegetables, partly as uncooked *Kosambari* or juice and partly cooked conservatively, should, per head per day, be consumed; the water in which the vegetables are cooked should not be discarded but must be used in making some liquid preparation consumed.

About eight ounces of milk and some citreous or other juicy fruits should be taken daily.

Whole (husked) rice with germs and bran intact, should be ground into a flour. This whole rice meal flour, with as little a quantity of dhals as possible, should be kept soaked in a small quantity of water for sometime and then ground as for making *dosai, appam* etc. The water in which the rice meal and dhal is soaked should not be discarded but utilized in the grinding or thinning the ground stuff. Hoppers (dosai, appam, iddali, etc.), should be made of the ground stuff and eaten instead of cooked rice prepared in the usual manner. These hoppers will give work to the teeth to some extent. Better still, beaten rice and puffed rice are made and eaten in a dry condition.

**Tooth troubles.**— The diet for tooth troubles should be the same as for good teeth given above, with an increase in the intake of milk and citreous or country guava fruit juice. The intake of cereals (rice, wheat, ragi, cumbu etc.), particularly soft preparations, should be reduced. Raw fruits and uncooked vegetables and also vegetables cooked in a manner so as to provoke mastication should be eaten generously.

The use of teeth in masticating the uncooked and cooked leafy and non-leafy vegetables, unripe berries and fruits, whole rice meal hoppers, beaten rice, puffed rice, etc., and mixing them with saliva, would give the digestion a good start, an exercise for the teeth and jaw muscles and help in keeping the teeth strong, clean and white.

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# A. R. P. AND HOUSE KEEPING

*By* P. P. SARADHI, *Sub-Judge (Retd.), Royapettah.*

MAN cannot be too precautious during war time. One elementary principle is to maintain presence of mind and avoid scare-mongering or getting oneself into a depressing neurosis, owing to fear and gruesome imagination.

Next, keep the surroundings free from thatched roofs and accumulation of combustibles.

Don't store rubbish and not immediately wanted articles within the house or even within the compound. Send them away to rural parts if you have a house or relations. You must be every minute ready to escape into the hinder land. The more you carry, the more cumbersome would be your escape. Don't invite any guests; postpone marriage functions or hold them in far away villages, whereby you are free from much expenditure too.

Secure as much moving space as possible within your residence, and if you are a co-tenant with others, vacate it and live in a suburb at least six miles away from the city.

Avoid building a new house for at least six months more for the present. If at all you want to extend buildings, let it be side ways and not at all vertically. Don't lop off tall trees; for you must not erect anything which would be an easy target for air-raid bombs and lose the protection of thickly foliaged trees.

Don't sink your money in multiplying house-construction for earning rents, for you may soon have to find your houses vacant for an indefinite period and lose by destruction even of the houses. The Indian has no craze for urban or city life except when he is a mere labourer or an artisan or a wage-earner. It is foolish for the well-to-do to prefer stewing in cities with all their attendant discomforts, to the happy and peaceful environment afforded by the country parts.

In this connection, we are pained to see that the Corporation of Madras had recently devised and delegated its responsibilities to an exotic costly body and secured the imprimatur of approval by the Government City Improvement Trust. The Administration Report shows despite the enormous growth of population to approximately 8 lakhs, the Corporation is still sanctioning any number of fresh building schemes and plans. Sensible people must make the Corporation executive *to stop any further expansion now at least.*

The greater the compass of the city, the more difficult and expensive it is to manage and maintain public health.

Maintain always a chest of medicines—and carry it wherever you have to go in case of danger. (Fever pills, cough tablets and lozenzes, unguents for external application for rheumatism, lumbago, headaches, burns and scratches etc.)

Hurry up A. R. precautions being practically taken by the city Corporation at once. The policy of *Laissez-faire* is dangerous. Routine and red-tapism is for the sluggard and

not for the intelligent and enterprising. Beyond the thickly populated regions, beyond in the north and the south, cheap sheds could be put up each with two rooms and a bath for a single family and from now allocated for families in advance, the whole camp being camouflaged by suitable foliage and other colouring. Water basins in brick and mortar by hundreds must be put up in every corner.

Make every man and woman caution-minded. The most important of all is attention to food-stuffs. Don't stock them all in your houses for more than a month. Let your credit to purchase the stuffs lie in villages and with the village producer or banker. Have your moneys in a fluid condition as much as possible or at easy calls. The Indian has somehow a stupid habit of cumbering his house-hold with a lot of material (broom-sticks and bundles of leaf-plates not excluded). This writer has seen the insides of hundreds of houses where, without any scientific thought, even combustibles are all hurdled together in the same room.

A. R. P. must in reality become an A. R. P. Act.

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## Topics from Medical and Health Periodicals

### Killing Animals for Food

No flocks that roam the valley free,
To slaughter I condemn ;
Taught by that Power that pities me,
But from the mountain's grassy side,
A guiltless feast I bring ; A scrip with herbs and fruits supplied,
And water from the spring.

—*Goldsmith.*

### How to have Health

CIVILIZATION is hunting after health. The hunt is for remedies and cures only. No effort is made to locate the cause of disease.

There is no cure without a removal of the cause. When the cause is removed that is the Cure! Nothing more is needed.—*The Indian Naturopath.*

### Mental Factors in Catering

"WE have all had the experience of finding that we can enjoy our dinner better if it is nicely served and eaten in good company. These are purely mental phenomena" writes Mr. H. G. P. Castellain, in the *Medical World*. He adds, "A corollary to this effect is the good the food does him, otherwise his assimilation of the food. Another corollary will be that a given amount of food will give a greater amount of nourishment if nicely served than if just thrown at one, and so that true economy of foods depends largely on its serving. This principle is made use of in catering for the sick, but it should always be observed in catering for the well."

### Dangers of Liquid Paraffin

DR. JAMES BURRNET writes in the *Medical World*: "My firm belief is that liquid paraffin is liable to cause cancer of the bowel. When taken internally it is bound to set up considerable irritation of the gastro-intestinal mucous membrane. I have notes of a number of cases of cancer in all of whom the taking of liquid paraffin as a cure for constipation appeared to me to be the exciting causal agent. Most of these were examples of carcinoma of the rectum, but in one the caecum was the seat of the disease".

### Dreams

IN pre-historic times, dreams were considered to be supernatural in their origin and indicative of future. This view was not shared even by some of the early philosophers of the West. With the advent of the science of Psychology and psychopathology, the subject of dreams has undergone much investigation at the hands of the psychologists. The close relationship between the mechanism of dream formation and that of symptom formation in various forms of neuroses suggest the theory that, just as neuroses originate from repressed and unsatisfied wishes and impulses, dreams, too, originate from the same source. The only difference is that one is the expression in open physical behaviour, whereas the other in mental, during sleep. The reason is that the repressed and unsatisfied desires which in themselves contribute mental conflict, direct their energies into abnormal paths, leading to abnormal behaviour, mental or physical, such as transference, rationalization, development of mannerisms, slips of tongue and pen, forgetting etc., and dreams during sleep.— Dr. N. P. BENAWRI, M.B., B.S.,—*King George's Medical College Clinical Society Journal, Vol. XXIV.*

## Leeches

LEECHES are only too frequent in many countries. But the medicinal leech comes from the south of France where it is bred for the market. This source of supply is now cut off and it may be doubted whether a leech could be obtained anywhere in this country (England).There are many who will not regret this,since they have never used a leech.Others consider that the same effects can be produced by surgical means. This is not altogether true for there are certain psychological effects in connection with the leech which even the most repulsive of surgeons could scarcely feel able to reproduce. Nor is it easy to see how the effect of a leech in the temporal region, which is often so excellent in eye diseases, could be obtained by surgical measure.—*Medical World.*

## Vitamin E found to be Muscle and Nerve Aid

VITAMIN E, known as the fertility vitamin from wheat germ, is being hailed in medical circles as a probable cure for hitherto hopeless diseases of muscle weakness and nerve degeneration. It is also seen as a possible means of protecting children against infantile paralysis and adults against locomotor ataxia.

Striking results in treating more than a score of human patients, suffering from incurable and even fatal muscle weakness and nerve degenerative diseases with vitamin E are reported by Dr. Franklin Bicknell, Honorary Physician to the Farringdon Dispensary. —*The Lancet.*

## Aspirin and Teeth

THE harmful effect of aspirin on the teeth is revealed in the account by Dr. D. B. Pott in the *Edinburgh Medical Journal*, of a series of experiments he has lately concluded. Five grains of aspirin were dissolved in two ounces of water and four teeth, the roots of which had been wax coated, dropped in. In ten minutes, a measurable amount of calcium had been eaten away by the acid action of the aspirin. This action continued throughout the experiment.

## Tuberculosis Sanatoria

THE chief object of organising tuberculosis relief is to prevent the spread of the disease by isolating the patients from their family surroundings and teach and train them up in correct living with regard to prevention of tuberculosis. The sanatorium is intended to serve as a central object to create and focus interest and enthusiasm in the cause of rooting out the scourge of tuberculosis. For instance, the discipline enforced in the institution in the use of the spittoon is of great educative value. Within the short period of two years since the Perundurai Sanatorium started functioning, the amount of interest and questioning spirit evinced by the public leaves us in no doubt as to the ultimate success of the scheme of the rooting out of the disease altogether within a measurable space of time.—Rai Sahib Y. P. VASUDEVAN, M.B., B.S., B.Sc.—*The Coimbatore Dt. Medical Association Annual, 1940.*

## Syphilis and Marriage

EVERY person with syphilis should be considered individually in determining fitness for marriage. Consideration must be given to the duration of the disease and the sex of the infected person. Women are less eligible than men, as primary, secondary and tertiary syphilis is communicable to the offspring; if women do marry, it must be with the assurance that they will take treatment throughout pregnancy, regardless of the blood reaction. Also of importance is the amount of treatment received by the infected person at least 18 months in early syphilis. The final consideration should be given to the economic responsibilities of the marrying persons as well as to the social rights of the community. There are cases, of course, in which because of legal entanglements (illegitimacy and the legalisation of common law marriages) the physician may conscientiously disregard any of the usual standard and certify a person for marriage. At no time should the inconvenience of a postponed marriage interfere with certifying physician's judgement.—*Medical World.*

## The Menopause

THE term menopause signifies the complete cessation of menstruation. It is, in a woman's life, the critical period, signifying the beginning of the decline of vital forces. Partly as an effect of their female friends making known to them various bodily derangements attending menopause and partly as an effect of advertisements of pills and potions calculated to give them relief at the critical period, women approaching menopause often make anxious querries regarding what is going to happen to them. But there are those who hide their anxiety with the result that the hidden emotion may give an out-burst at the time of menopause.

There are all grades of disturbance associated with menopause, from the slight and transitory to the profound and long continued and while it lasts, it is distressing and causes both mental and physical discomfort. But, in fact, a healthy woman passes through this period of her life with little or no discomfort and emerges from it and enters upon a renewal of life and wonders what all the fuss is about. Again there is the erroneous notion that after menopause, a woman will not be of any good to her husband. Indeed, at and after the menopause, there is increased sexual desire; for, both sexual desire and pleasure may continue as long as life lasts. Hence, I would like to call the menopause 'renewal of life.' No woman need suffer the inconvenience and discomfort of a disordered menopause.

The menstrual function does not stop suddenly. A normal menopause is one where the menstrual flow gradually diminishes in quantity, duration and frequency until it finally ceases, and which is attended with or followed by little or no disturbance.—FREDERICK T. MECANNON, M.D., F.R.C.S. (Eng.) —*Medical World.*

## Diet for an Athlete

That strong men are the pillars of a nation is being recognised by all. But what makes them strong is not known to many. The importance of physical exercise is now being stressed in schools and colleges. The authorities concerned seem to believe that physical activities alone can produce men of iron. They attach no importance to the part played by diet in the development of the body. Physical exercise without proper diet is like a burning lamp without oil. As a result of exercise, the various systems of the body do more work for which more energy is required. This energy is supplied by the intake of food. But the food taken in by a man should be easily digestible, so that the amount of energy wasted in the removal of undigested matter is a minimum. A large quantity of indigestible stuff in the digestive organs distends them, thereby pushing the diaphragm upwards, as a result of which there is an impediment to the respiratory functions. For the same reason, the intake of excess of liquids at inappropriate times is forbidden. That the food ought to be palatable to the individual needs no mention here.

The quantity of food to be consumed by an athlete depends upon his natural appetite. It should never be supposed that strength is automatically acquired from the food and it is a gross mistake to fill up the belly on this misconception. Anything taken beyond the normal needs of appetite will be an encumbrance and a waste.

Sugar, on account of easy digestion, forms a proper diet immediately before exercise. Carbohydrate has got an exalted place of reverence in the realm of physical exercise. It is the immediate source of energy of muscular exercise. The part played by *protein* in muscular exercise is very well known. In prolonged muscular exercise, the lost energy is obtained by consuming a diet rich in protein such as milk, butter, cheese, eggs, etc.

Fats do serve as a good source of energy ; but it is not desirable in the diet of an athlete on account of the quantity of heat it gives rise to. Nuts are of special practical value to the athlete ; they contain all the three elements,—fats, protiens and carbohydrates in correct proportion fit for a man doing muscular work. But, in the matter of digestibility, they fall short ; hence large quantities should be avoided.

Large quantity of water may be taken when the stomach is empty. Smoking should be avoided as it increases the pulse rate and decreases the intake of oxygen. Fresh air is as essential as any other food.—*Vizag. Med. College Mag.*

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DOCTOR (to a drunkard) : "Liquor is our worst enemy."

Drunkard : "Haven't we been taught to love our enemies ?"

Doctor : "Yes, but not swallow them."—*Bulletin of the Buncombe County (N. C.) Medical Society.*

## Breast-feeding

NO brain can invent a more nutritive fluid for infants than breast milk—that secretion of the mammary glands which is the ideal food provided by Nature. Whilst breast milk is an undisguised blessing to the newly-born and the infant in the first year of life, the successful management of breast-feeding, to have its full result, depends entirely on the intelligence and co-operation of the mother.

That there is no substitute to breast milk is admitted by all. The only milk like the breast milk is breast-milk. Breast-feeding is the infant's birth right and he must have it. However, there are a few contra-indications which may be considered.

*During pregnancy, the health of the mother,* due to improper diet, may be so much below par that breast-feeding may be considered as almost adding insult to injury. In such cases, breast-feeding would drain the resources of the mother and would be a camouflage to the poor infant. A lot can be done to improve the condition of the mother by proper and careful dieting. Where this is achieved, breast-feeding will not be contra-indicated.

No chronic disease, except pulmonary tuberculosis, forms a contra-indication to breast-feeding. But the precarious condition of the mother due to disease should be taken into consideration. The danger of aerial infection to the infant, when the mother is suffering from open pulmonary tuberculosis, is too obvious to need an argument. Syphilis in the mother presents quite a different picture. A syphilitic mother should nurse her baby. A syphilitic baby should not be put into the breast of a healthy wet nurse. In cases of acute infections, the mother may be so ill that artificial feeding will have to be resorted to. In mild infection, breast-feeding need not be discontinued if proper precautions are taken. Re-appearance of early menstruation does not call for discontinuance of breast-feeding ; neither is the early pregnancy a bar to breast-feeding.

The main constituents of breast milk are protein, fat and carbohydrate. The after-milk is richer in fat and yellowish in colour which is apt to be mistaken for pus.

The breast-milk is not richly supplied with vitamins. While A and B are found in fair amount the deficiency of C and D must be met by administering orange juice and cod liver oil from the second month onwards. It is poor in iron ; this accounts for anæmia found in normal breast-fed infants.

The quantity of milk in the breast of a healthy mother depends on the capacity of the child to empty it and also on the mother's diet, exercise, temperament and her environment.

Breast-milk by itself is sterile, but as it comes in contact with the nipple, it becomes contaminated. If the nipples are kept clean, the contamination is so slight as to be negligible.

After confinement, the mother needs all the rest that may be given her. After about eight hours, the infant is put to the breast,

thereafter, every six hours for the first three days. During this time an alternate breast should be offered at each feed. After this period, baby is offered the breast every three hours. To shove the nipple into the baby's month every time it cries is a pernicious habit. The mid-night feed should not be offered. Baby should sleep continuously after the last feed in the night. The mother needs a good night's rest if she is to fulfil her duties properly. A tea-spoonful of plain boiled water is all that should be given in-between the feeds.

Now about the process of feeding. The mother must sit in a comfortable position—tiring should be avoided. House-hold worries must be temporarily forgotten. The baby is laid comfortably on the lap and the head is supported by the arm on the same side as the breast that is offered. Head is kept slightly flexed so that the act of swallowing may not be difficult. Care is taken that the nose of the child does not get buried into the mamma—free nasal breathing is thus assured. The baby must never be allowed to sleep at the breast.

After every feed, baby should be held upright on mother's shoulder and gently tapped on the back. By this, the air that the baby might have swallowed is brought up. Before and after every feed, the nipple should be washed with clean plain boiled-water. Weaning should be gradual. By this the mother's breasts adapt themselves to secrete less milk and the child's digestive system adapts itself to the new food.—*The Medical Bulletin.*

## The Feeding of Infants in India

'THERE comes a period in the lives of most babies in India when natural food must be abandoned' says E. H. Vere Hodge, M D. 'The best substitute is fresh cow's milk, modified or diluted according to the digestive capacities and needs of the infant. Cow's milk must conform to certain standards. It must be clean, for there are many sources of contamination—the milker's hands, dirty vessels, vessels washed with polluted water, dirty udders of the cows. The danger of transmitting tuberculosis from an infected cow to the infant is a real one and it must be remembered that a high proportion of the tuberculosis of infancy is bovine and may be attributed to milk-born infection, though this danger in India is not so great as in England. Dirty milk, even if boiled, is still dirty and the swarms of dead bacteria may set up intestinal irritation'.

* * *

'The milk must have a good vitamin content. This will depend on the surroundings and feeding of the cow. The effects of feeding and sun-light on the vitamin content of milk have peculiar application and importance in India. The vitamin content is poor when the cow is fed on dried fodder as it is in the plains of India in the hot weather'.* * *

*Goat's milk*—In many parts of India, the milk of goats is used with success as a substitute for cow's milk. The goat is easily kept in the compound, and milked under supervision, but special care must be taken to frustrate its natural tendency to promiscuous feeding. The animal being less subject to tuberculosis than the cow, the milk may be given unboiled, should circumstances demand.

The milk has approximately the same proportionate contents as cow's milk and is used in the same way, modified or diluted to suit the individual.'

## Artificial Feeding of Infants

*General principles*:—1. The infant requires 1½ ounces of Cow's milk in 24 hrs. for each pound he weighs. This amount will satisfy his minimum protein requirements, his fat and his salt requirements.

2. The infant requires between 1/8 and 1/10 of an ounce of sugar in the 24 hours for each pound he weighs.

3. The infant requires from 2 to 2½ ounces of fluid in the 24 hours for each pound he weighs.

4. The caloric value of the milk is approximately 20 per ounce.

5. The caloric value of sugar is approximately 120 per ounce.

6. The caloric needs of the infant vary between 45 calories and 60 calories in the 24 hours for each pound he weighs.

7. A normal infant, weighing 10 pounds, will need in the 24 hours:

| | | |
|---|---|---|
| Milk | 1½ x 10 | 15 ozs. |
| Sugar | 1/8 x 10 | 1¼ „ |
| Fluid | 2½ x 10 | 25 „ |

8. As, however, there are 15 ozs. of fluid in the milk already given, the infant will require only the addition of 10 oz. of water to make the total fluid intake upto the requisite 25 ounces. So milk 15 ozs, sugar 1¼ oz. and water 10 oz. will be required—A. G. MAITLAND JONES.—*The Coimbatore Dist. Medical Assn. Annual, 1940.*

## Eat Potatoes

"THOUGH it looks humble", writes Stanley Lief, N.D., D.O., D.S., "potato is one of the most important foods. When properly stored, potatoes can be used for months together. The potato is rich in iron, calcium, phosphorus and potassium, and it has also been found to contain magnesium, sodium, sulphur, chlorine, manganese, silicon, iodine and copper, among other minerals. As these are used by the body in its work of maintenance, it will be realised that potato's pre-eminence as an article of food is well-founded.

The potato does not contain the fat-soluble vitamins, but it is a useful source of the water soluble ones. Of the latter, vitamin C may be considered the most important to be found in the potato, although, in cooking, substantial losses may take place. Vitamin B content of the potato may be considered as about equal to that of whole wheat bread measured when both are dehydrated.

The losses of vitamin during cooking in water are due to diffusion as well as to

destruction of the vitamin, and in this respect particularly, the advantage of steaming, as a method of cooking, is well evident. It must be emphasized, however, that slow methods of cooking, or keeping hot for long periods, may cause almost total destruction of the vitamin C content. Steaming has also the advantage of conserving the mineral content of potatoes. In this respect it has been found also that unpeeled potatoes lose less than peeled ones.—*Health For All.*

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### Our Life is Guided by Colours.

THE colour element in Nature has a direct effect on our lives. Often it is more effective than expected. Colour has the power to effect a change in our likes and dislikes, and is itself "A most Important Food of Human Senses" as Dr. Edward Podolsky calls it. Cases after cases in which colour is responsible for emotional reactions can be cited. The change in the colour of the Black-Fairs Bridge in London reduced the number of suicides. The change in the colour of New-York Hotels increased the appetite of the customers. The change in the colour of blackboards in schools made the boys happy. The change in the colour of the walls of hospitals improved the attitude of patients. The change in the colour of ceiling of a factory made the workers happier. Scarlet colour was used in schools to stimulate lazy pupils, and utilized by Dr. Camille Flaammarion for swifter growth of plants, with success. Dull yellow coloured food may cause nausea. Yellow should not be used in passenger cars. Green is preferable here. Red tooth brushes sell faster than any other colour. But in fountain pens the popular colour is green. Orange blue decorations in kitchens make wives content. White is connected with moon light and romance. Girls in white get their men much more often. Black colour is best for sleeping. Cardinal red will be best for play-room. Browns are suitable for dining rooms. Dr. Podolsky explains that colour influences moods. White is symbolic of purity and red of passion. There is many a colour mood expression in every language. Different countries like different colours. Colour may even indicate personal habits. Intellectuals love Blue, athlets love Red, egolists have a passion for Yellow and most convivial people usually choose Orange.

Colours influence our lives so much because, of all the senses, sight is the guiding and the most important one. One's life is practically nothing without sight. Colour, no doubt, works on mind rather than on the body. But Dr. Rober R. Ross of Stanford University in California, working on a scientific basis found that Red had the greatest effect on muscular activity. Activity at normal light was set at arbitrary figure of 23 units. Blue light increased it to 24, Green to 28, yellow to 30, and Orange 35. But, when the scarlet was flashed on, the activity of the muscles of an average jumped to 42 units. That is why Red is used in some schools for stimulating lazy pupils.

In fact, various connections between men and colours are nearly endless. This makes Dr. Podolsky say, "This is a world of colours and each exerts a definite effect on our mind and physique."—J. P. MITTAL.—*King George's Medical College Clinical Society Journal.*

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### Effects of Temperature Changes

A better name for hydrotherapy would be thermo-therapy, or heat therapy. The water is the best vehicle for the application of heat, or its opposite, cold, to the body. It is usually the heating or cooling effect that achieves the desired results, and not any mystical property of water.

There are two chief effects of hydrotherapy. It influences the oxygen consumption in the tissues and also affects the movement of the blood.

Short hot and short cold applications are stimulating to the body. They accelerate the oxidative processes. For instance, a short, brisk, cold shower, has a marked influence on the body. After the shower, as one rubs himself vigorously with a towel, he feels warm, there is a heat-producing effect. One notices that the skin appears red—there is a circulatory effect. One feels refreshed and invigorated, for the nervous system is stimulated and energized—a nervous effect. Taken as a whole, these effects constitute what we term a "good reaction." Short heat, as the fomentation, does much the same thing as the brisk, cold shower.

Long-continued hot or cold applications on the other hand, are depressing. The body processes are slowed, and the circulation becomes sluggish. This is well exemplified by the enervating effect of tropical heat upon the average white person. The frequent reports of people first becoming benumbed, languorous, then sleepy, and finally freezing to death, make vivid the depressing effect of long-continued cold.

Both hot and cold applications influence in several ways the movement of blood in the skin and the functional activity of the underlying organs. One effect is obtained through what we call the reflex arc, via the nervous system. In this case, the application to the skin produces changes in the underlying organs similar to the changes produced in the skin. As an illustration, an ice bag applied to the area overlying the heart, slows down the heart and also diminishes the functional activity of the skin over which it rests. Reflex effects are concerned usually with small areas, like the one mentioned.

Heat dilates the vessels of the extremities making them hold more blood. Cold applications to the feet and legs produce exactly the opposite effect. Mechanical effects predominate over reflex when applications cover a large area. These are the real effects of the heat or the cold.— *Good Health (London).*

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"I THOUGHT the doctor only allowed you one or two glasses of beer a day—you are already drinking your fifth."

"Yes, but I have three doctors now."

## Hygiene After 40 Years of Age

AFTER forty, certain special considerations in personal hygiene are necessary. Strenuous exercise has to be given up to avoid exces-feeding and to avoid tendency to put on weight. It is necessary to ensure proper bowel action and to have regular dental examination. Over 50, life must be lived at a still less strenuous exercise but activity, especially, in the open air must be maintained. After sixty is passed,retirement from business is advised and are recommended to some hobbies. For want of proper hobby, there are few who live after retiring from business. Lack of mental work has a profound effect on physical condition; so hobbies of some kind, old or new, manual or mental,are to be taken. In the declining years of life, personal hygiene must be much modified. The skin is now dry and inelastic, the layer of fat under the skin is gone, the heart and blood vessels are more sluggish, the muscles are stiffer and weaker, the cells of stomach and bowels are less active. For these reasons, clothing must be warmer in cold climate and lighter in hot climate. Sleep must be increased to 10 or 11 hours. Diet must be light and easily digested. Meat must be lessened, even may be given up and milk increased. But one should not too suddenly change his diet. Old men should not dose after their meals; they should take short walks. Sudden efforts of exertion must be avoided to prevent old heart and arteries being injured. Bowels must be kept active. Mental exercise should never be wholly abandoned. The aged feel no need for mental stimulus as a rule, but the lack of it will cut short life. Lastly old married couples should never be separated if it can be avoided. The breaking in old age of the associations of a lifetime usually accelerates death.

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## Leave 'em Where They Lie

HOW serious is shock?

It is the most serious result of an accident that occurs, and causes more deaths than all other causes combined.

Can shock be controlled?

Yes, and many lives saved; or, if you like, many unnecessary deaths avoided.

How can you control shock?

The right thing to do: stretch the patient out flat on the side of the road and keep him warm, covered with coats. Have his head and body sloped downhill. Keep him warm and quiet. Give him a drink of whiskey or coffee if possible. Auto cushions are soft and warm to lie upon. Keep him there (or moved into a nearby house if the weather is bad) until the pulse slows and the skin is dry. Even if an ambulance has arrived, still keep him there. If a leg is broken, keep him there; if his arm or ribs or back are broken, keep him there. If he had a head injury and is unconscious, keep him there until SHOCK is controlled, or improved by keeping still, quiet and warm.

If he is put in a car and raced through the country, chilled by open windows and handled a lot, he will die; and you will have killed him by exposure, hurry and excitement.

What happens if the shocked patient is not kept quiet, still and warm?

You will increase shock by moving, hurry, exposure and excitement and he will die from shock on the hurried way to the hospital or on arrival.—*Texas State Journal of Medicine.*

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## Eruption due to Wrist Watch Strap

A CASE in which a wrist watch strap which had been worn continuously for two months with no evidence of sensitivity suddenly caused a skin inflammation is reported by W. W. Bauer, M.D., Chicago, in *The Journal of the American Medical Association.*

The strap was made of a new synthetic, flexible, glass-like substance sold under a variety of trade names. It was responsible for intense itching and redness of the skin in contact with the watch band, followed by a definite eruption which the author thinks may have been precipitated by the patient's spending four hours in conference in an excessively hot room, during which time he perspired rather freely.

The patient has had hay fever since the age of 3 and is also sensitive to vegetables of the cabbage family and to certain fabrics.

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## Typhoid Fever and Vacation Days

WARNING is given that the number of typhoid fever cases increases during vacation travel days. People should be careful in choosing their milk and drinking water as a precaution against this disease, especially when they are "on the road".

To avoid water which might possibly be contaminated, the safest practice is to drink water which has been approved by the Department of Health of the province through which you pass. The safest milk is that which is produced under sanitary conditions and has the added safeguard of pasteurization.

Warning is also given that high summer temperatures predispose to contamination of perishable foods. Travellers are advised to select food shops which are sanitary, have facilities of refrigeration and are free from flies.

Precautions with regard to food and drink are "doubly important" when babies are taken along on vacation. Infants need all possible protection against gastro-intestinal disturbances.

Immunization against typhoid fever by means of vaccine is a wise precautionary measure for people who travel and are subject to varied milk, water and food supplies.—*National Health Review.*

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# Home Remedies

### Bladder-irritability

THIS complaint causes frequent desire to pass water. It may be due to inflammation, debility and nervous weakness in adults. An irritability of the bladder is often due to an over-acid or watery state of the urine or ammoniacal changes from retention or the presence of stone or sugar in the urine. Irritability may also be caused by disorders of other parts of the body such as constipation, intestinal worms, piles etc. Treatment depends upon the cause. A hot bath will generally be advisable. Hot fomentation should be applied over the lower part of the bowels. Barley water should be given as a drink. The bowel should also be opened. The patient should be kept in bed and given a low diet such as milk and congee. *If he does not get better, send for the doctor.*

* * *

### Boils

BOILS are little abscesses in the glands of the skin. The first indication is often the appearance of an itching pimple close to the hair with a patch of redness around it. Stinging and throbbing pain follows. The pimple breaks and discharges and in about 4 or 5 days the core comes away.

*Treatment.*—In the early stage, pulling out the little hair on the pimple will prevent development of the boil. If too late for this, apply poultice and hot fomentation. Internally, give a saline purge such as sulphate of magnesium—4 teaspoonfuls.

* * *

### Breast Abscess

USUALLY arises after the first pregnancy from over-distension during suckling. The nipple is often ill-found owing to pressure so that the baby cannot properly relieve the best. When only one breast at a time is empty the full one is liable to become over-distended and cause inflammation. A blow on the breast may rupture a milk tube and lead to milk tumour. All these conditions lead first to swelling of the breast and later on, if unchecked, to formation of pus. When the inflammation starts, there is throbbing pain and fever and after a while the skin becomes red and thinny matter mixed with milk escapes. In such cases, early medical advice is essential to prevent irreparable damage ; so send for the doctor at once.

* * *

### Breast Swelling

AFTER child-birth,the breast becomes swollen, hot and liable to be inflamed from slight causes such as chills or from over-distension of milk. At this time they should be carefully protected, all pressure removed from the nipple and milk regularly drawn off by the infant or by some mechanical contrivance such as breast pump. If any naughtiness is observed, the part should be gently rubbed with almond oil for 5 to 10 minutes every half an hour and covered in the intervals with a warm water dressing. If the bowels are confined, give castor oil or Epsom salt.

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### Bronchitis

INFLAMMATION of the mucous membrane of the air tubes are called *bronchitis*. These disorders are common during damp climate and change of climate. Occupations which involve *exposure to the weather or to extremes of* hot and cold or to a dusty irritating atmosphere increase the liability to bronchitis.

*Symptoms.*—Acute bronchitis often begins with a cold in the head together with slight fever, cough, pain and oppression on the chest. The cough is at first dry and soon frothy or yellow. Phlegm is brought up. As a rule, the breath is short, cough is *excited* by exertion or exposure to cold.

*Treatment.*—The patient should go to bed in an airy room. Encourage perspiration by using hot bottles, by drinking hot milk or hot water. A hot bath or vapour bath is also useful as a preliminary measure. Hot linseed and mustard poultice should be applied to the chest and left arm till the skin is reddened. Plenty of fresh air is necessary although cold air is to be avoided.

* * *

### Bruises

BRUISES or contusions may be simple or complicated with an open wound. In all cases small blood vessels are injured and blood escapes into the tissues causing swelling and discolouration. Simple bruises are best treated by raising the part and applying cold and gentle pressure, ice bag or evaporating lotion or cold compress is suitable for this purpose. Later on when pain and tenderness have gone, bandaging or cold douche followed by friction with some stimulating liniment such as turpentine will assist absorption and help to restore tone.

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### Burns and Scalds

BURNS are caused by heated solid bodies or naked flame ; scalds by hot liquids. A slight burn causes pain and redness of the skin. A more severe burn will cause blistering and a still more severe one, injury to the deep skin or to the soft part below. Severe burns cause much shock to the system which must be attended to by a doctor.

*Treatment.*—Remove the clothes piece-meal by cutting them as they may adhere to the body. If the skin is not blistered apply cotton wool and bandage and leave alone for 24 hours. Should there be blisters,these must be snipped with scissors and emptied by gentle pressure. When there is a raw surface, boric ointment or some other oily preparations should be applied.